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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/673,185

09/30/2003

Kazuhito Hoshino

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10/04/2004

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EXAMINER

KAO, CHIH CHENG G

ART UNIT

PAPER NUMBER

2882

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/673,185

Applicant(s)

HOSHINO, KAZUHIRO

Examiner

Chih-Cheng Glen Kao

Art Unit

2882

Am

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-9 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/30/03, 5/4/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Fig. 2, #47. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The abstract of the disclosure is objected to because the abstract may not exceed 150 words in length. Correction is required. See MPEP § 608.01(b).

Claim Objections

3. Claims 3, 4, and 7 are objected to because of the following informalities, which appear to be minor draft errors creating lack of antecedent basis problems.

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In the following format (location of objection; suggestion for correction), the following suggestions may obviate their respective objections: (claim 3, lines 2-3, "the X-ray path"; replacing "the" with - -an- -), (claim 4, lines 2-3, "the X-ray path"; replacing "the" with - -an- -), (claim 7, lines 10-11, "the results"; deleting "the"), and (claim 7, line 13, "the results"; deleting "the").

For purposes of examination, the claims have been treated as such. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3, and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Fawcett et al. (GB 2156974).

5. Regarding claims 1, 7, and 9, Fawcett et al. discloses an apparatus and method comprising X-ray measuring means for applying X-rays (Fig. 1, #26) to a sample (Fig. 1, #20) and detecting X-rays (Fig. 1, #36) generated by the sample; gas-analyzing means for analyzing gas (Page 6, line 5-7) generated by the sample; sample-holding means for placing the sample at a position which is common to the X-ray measuring means and the gas-analyzing means (Page 3, line 7); sample temperature-controlling means for controlling a temperature of the sample (Page

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4, lines 35-39); and control means for controlling the X-ray measuring means and the gas-analyzing means, causing the same to detect the X-rays and analyze the gas at the same time (Abstract), or control means for controlling the gas-analyzing means, causing the same to analyze the gas, in accordance with results of measuring performed by the X-ray measuring means (Page 7, lines 4-13).

6. Regarding claim 3, Fawcett et al. further discloses wherein the sample-holding means (Fig. 1, #24) holds the sample (Fig. 1, #20) and is arranged on an X-ray path (Fig. 1, #32) in the X-ray measuring means, the X-rays are applied to the sample held in the sample-holding means (Fig. 1), the X-rays generated by the sample are emitted outside (Fig. 1, #34 or 34') the sample-holding means, and the gas generated from the sample are discharged outside (Fig. 4, #146, and Page 6, line 4) the sample-holding means.

7. Regarding claim 8, Fawcett et al. further discloses sample temperature-controlling means for controlling a temperature of the sample (Page 4, lines 35-39), and in which control means changes a condition of controlling the temperature of the sample, in accordance with results of the measuring performed by the gas-analyzing means and/or results of the measuring performed by the X-ray measuring means (Page 7, lines 4-13).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made

8. Claims 2, 4, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fawcett et al. as applied to claim 1 above, and further in view of Uchiyama (US Patent 5528032).

9. Regarding claim 2, Fawcett et al. discloses an apparatus as recited above.

However, Fawcett et al. does not disclose analyzing means as a mass spectrometer capable of measuring the mass number of the gas.

Uchiyama teaches analyzing means as a mass spectrometer capable of measuring the mass number of the gas (col. 4, lines 34-42).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to modify the apparatus so Fawcett et al. with the mass spectrometer of Uchiyama, since one would be motivated to incorporate this for only needing to set a single reference (col. 2, lines 15-20) as shown by Uchiyama, thus saving time.

10. Regarding claim 4, Fawcett et al. further discloses wherein the sample-holding means (Fig. 1, #24) holds the sample (Fig. 1, #20) and is arranged on an X-ray path (Fig. 1, #32) in the X-ray measuring means, the X-rays are applied to the sample held in the sample-holding means (Fig. 1), the X-rays generated by the sample are emitted outside (Fig. 1, #34 or 34') the sample-holding means, and the gas generated from the sample are discharged outside (Fig. 4, #146, and Page 6, line 4) the sample-holding means.

11. Regarding claim 5, Fawcett et al. further discloses sample-holding means (Figs. 3 and 4) having an annular member (Figs. 3 and 4, #24) that has a space for holding the sample, a pair of shield members (Fig. 4, #48 and 99) that contact front and back sides of the annular member and shield the space from outside, and a gas passage (Fig. 4, #144 and 146) that connects the space in the annular member to the space outside the annular member.

Allowable Subject Matter

12. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and all intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 6, prior art does not disclose or fairly suggest an apparatus including pressing means that presses shield members onto an annular member, in combination with all the limitations in the claims, all intervening claims, and the base claim.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Cheng Glen Kao whose telephone number is (571) 272-2492. The examiner can normally be reached on M - F (9 am to 5 pm).


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



gk



EDWARD J. GLICK
SUPERVISORY PATENT EXAMINER